



SCOPE OF SERVICES

Solicitation Number:CLMP315

Project Name: 2021 Engineering Services for Power Production Rotation List

PROJECT FOR:

CITY OF AUSTIN, *AUSTIN ENERGY*, THROUGH ITS CAPITAL CONTRACTING OFFICE

PROJECT TITLE:

2021 Engineering Services for Power Production Rotation List

OBJECTIVES OF THE ROTATION LIST:

The City of Austin (City) anticipates selecting up to four (4) firms to provide professional engineering services for Austin Energy's Power Plant Production improvements.

BACKGROUND:

The City currently has rotation list agreements with four (4) firms to provide consulting engineering services for its facilities. It is anticipated the contracting authority for the existing rotation list will soon be exhausted. The selected firms will assist Austin Energy with the below power production facilities:

- Decker Creek Power Station which consists of one gas-fired steam units and four simple cycle gas turbines
- Sand Hill Energy Center consists of a 1-on-1 combined cycle unit and six simple cycle gas turbines.
- Several thermal energy (chilled water and steam) plants and distributed generation facilities.

The following is a sample of previous assignments awarded using the current rotation list:

- SHEC Heat Recovery Steam Generator failure investigation
- Engineering study to re-route Decker floor drains
- Four Seasons residence chilled water extension
- Engineering support for SHEC 100 Megawatt addition Phase II
- SHEC re-designing maintenance building
- Steam system modification at Domain
- Design control changes and drip leg for SHEC condenser
- Investigate condenser tube failures at SHEC
- Engineering evaluation of Circulation Water Pumps at SHEC
- CAD services for Decker
- LEEDS certification for SHEC control/administration building

- CO2 reduction options evaluation

COST ESTIMATE:

The City anticipates selecting approximately four (4) firms with an estimated authorization amount of \$750,000.00 for each firm, for a total maximum authorization amount of \$3,000,000.00.

Compensation of individual project assignments will vary depending upon the scope of services required. Funding will come from the individual projects for which the services are provided. The City anticipates developing and executing a professional services agreement with each selected firm.

If a firm ceases practice during the contract period, or should the City elect to terminate its agreement with one of the selected firms, the remaining authorization will be distributed to one or more of the remaining firms.

PROPOSED PROCUREMENT SCHEDULE

RFQ Issue Date: Wednesday, June 16, 2021

Pre-Response Meeting Date: Wednesday, June 23, 2021

Submittal Due Date: Wednesday, July 14, 2021

Anticipated Council Date: September 2021

Contract Execution: December 2021

ANTICIPATED SERVICES:

The selected firms shall provide specialized engineering and associated technical services necessary for the planning, analysis, evaluation, and design of improvements, additions, and upgrades to Austin Energy's power generation and thermal energy facilities. The projects assigned will consist of new builds and retrofits to existing plant systems with the objective of improving overall plant safety, operation, efficiency, and reliability.

The following are areas in which engineering services may be provided, but not limited to:

1. Provide support in mechanical, electrical, structural, control, chemical, or other professional engineering roles. Also, provide engineering support for a Heat Recovery Steam Generation plant, gas fired boiler plant, and multiple gas turbines
2. Recommend improvements and/or modifications for performance and operation methods of Austin Energy power generation systems addressing:
 - Safety

- Efficiency/Optimization
 - Reliability
 - Environmental Impact
3. Evaluate existing processes, structures, and/or equipment including (but not limited to):
 - Performing failure and root cause analysis
 - Developing design criteria with applicable codes and standards
 - Budgeting cost estimates
 - Developing Bid documents
 - Producing As-Built in accordance with Personal Protective Equipment standards
 - Obtaining Permits
 4. Develop optimization of Austin Energy's Distributed Generation and Thermal Energy facilities, including:
 - Control System Upgrades
 - Boiler Replacements
 - Chiller Replacements
 - Modifications to enhance heat recovery
 - Expansion or upgrades to chilled water, electrical, and steam distribution systems
 5. Ancillary services:
 - Electrical relay coordination
 - Pipe stress analysis
 - Valve automation design
 - Site development assistance
 - Distributed microgrid development
 - Building heating/cooling power (BCHP) system engineering
 - Cost estimation in support of project business case development
 - Hydraulic analysis for chilled water distribution systems.
 6. Firms shall comply with Austin Energy CAD standards for document control, drawing format and drawing submittals.

Austin Energy's Power Production staff will provide project scopes as they become available. Selected firms shall provide a written proposal within a mutually agreed upon time frame. Work shall not begin until the approved Austin Energy representative and firm(s) have agreed to a scope, schedule and cost for each task or group of tasks. All tasks required to complete work shall be performed by the selected firm or by its subconsultants under the supervision of the firm, on a case by case basis. Austin Energy reserves the option to participate in the work to the degree deemed necessary or appropriate. When Austin Energy exercises the right to perform any part of the work, the selected firm shall cooperate with the assigned Austin Energy staff.

Phase A: Preliminary Phase

- Scope definition and clarification
- Construction market analysis
- Needs assessment
- Provide/perform existing conditions documents (furniture, fixtures and equipment (FF&E)
- Feasibility / alternatives study
- Facility inventories (real property)
- Space adjacency analyses
- Cost estimates
- Preliminary Schedule
- Develop project budget
- Preliminary reports (including preliminary engineering)
- Meeting Minutes

Phase B: Design Phase

- Cost estimating
- Schematic design
- Design development
- Construction documents development
- Obtain permits (Site & Building)
- Preparation of bid documents
- Meeting Minutes

Phase C: Bid/Proposal Phase

- Attend pre-bid/proposal conferences
- Develop addenda and clarifications
- Assist with review of bids/proposals
- Meeting Minutes

Phase D: Construction Phase

- Attend construction progress meetings
- Review and approve contractor schedule
- Respond to RFIs (Requests for Information)
- Submitting Architectural Supplemental Instructions (ASIs)
- Review contractor pay applications
- Review changes in the work (field orders, change orders (CO), and change directives)
- Review submittals/shop drawings and maintain the log/register of submittals
- Review/prepare punch list
- Assist in determination of substantial completion and final completion

- Conduct final walk through
- Meeting Minutes

Phase E: Post-Construction Phase

- Prepare record as-built plans
- Review and approve contractor as-built documents
- Review and approve contractors' Operations and Maintenance manuals
- Attend close-out walk-through
- Review and approve close out documents
- Review and approve warranty items
- Meeting Minutes

MAJOR AND OTHER SCOPES OF WORK:

Below is a list of the major scopes of work that the City has identified for this project. ****There must be representation for all major scopes of work listed in the prime's statement of qualifications.*** The experience of the firms listed to perform the Major Scopes of Work, whether a subconsultant or prime firm, will be evaluated under Consideration Item 6 – Major Scopes of Work – Comparable Project Experience.

In addition, the City has identified Other Scopes of work that MAY materialize during the course of the project. The City does not guarantee that the scopes listed under Other Scopes of work will materialize on this contract. If the prime consultant intends to enter into a subconsulting agreement on a scope of work not listed below, the prime consultant is required to contact SMBR and request an updated availability list of certified firms in each of the scopes of work for which the prime consultant intends to utilize a subconsultant.

*** Major Scopes of Work**

Controls System Engineering
Electrical Engineering
Mechanical Engineering
Civil Engineering

Other Scopes of Work

Building Permitting Services
Metallurgical Engineering
Structural Engineering
Electric Consulting
Welding
Cost Estimating
Complete Water Treatment Systems, Chemical

PERFORMANCE EXPECTATIONS

It is the goal of the City of Austin to decrease project timeframes with zero impact on the quality of work being performed. The selected consultants will be expected to:

- Reduce performance periods via efficient scheduling,
- Provide cost accountability,
- Provide quality control,
- Adherence to the timelines and provisions contained in the contract's standard terms and conditions, and
- Perform construction document management.

CONTRACTING AND ASSIGNMENT PROCESS

- Once a firm is selected to participate on a Rotation list and after Austin City Council approves – all selected firms will be invited to the Contract Kick-Off meeting to begin execution of their Professional Service Agreement (PSA).
- After a firm's PSA is executed, the firms will be placed in rotation for an assignment
- The Capital Contracting Office (CCO) Rotation List Manager receives the assignment request from the City of Austin Project Manager and issues an assignment letter to the consultant. The consultant will have the opportunity to accept or reject the assignment. After assignment acceptance, the consultant works with the Project Manager and provides a fee proposal for the assignment. After the Project Manager accepts the fee proposal, the Rotation List Manager issues the Notice to Proceed (NTP) to the consultant.
- The order of assignments on the FIRST pass will be ranked as shown in the order of the evaluation matrix. There may be exceptions to this based on the City's needs to expedite assignments and/or delays in PSA execution.
- The SECOND and subsequent passes will be sorted and ranked in order of each Consultant's highest remaining authority – that being – the firm with highest remaining authority will be receiving the first assignment for that pass.
- Towards the end of a rotation list CCO may make assignments out of the usual methodology in the best interest of the City by re-allocating a firms remaining authority.
- No work shall be authorized prior to receipt of a formal, written NTP. City of Austin Project Managers do not have the authority to authorize additional or subsequent phase

work prior to the formal, written NTP. Consultants who choose on their own to perform work ahead of the NTP and/or outside of their scope and budget are doing so solely at their own risk.

- The City may, however, select a firm that is felt to be the most qualified for a specific project or most able to meet a project's schedule objectives. Project-specific schedules will be agreed upon at the time professional services are defined.

Notes:

- Construction Inspection and Public Information and Communications are **NOT** subconsultant opportunities. These services will be performed in-house or under a separate contract, if needed, and will be determined when project assignment is made.
- Participation at the prime or subconsultant level may create a conflict of interest and thus necessitate exclusion from future contracting opportunities with the City.
- If the City determines that a conflict of interest exists at the prime or subconsultant level, the City reserves the right to replace/remove the prime or instruct the prime consultant to remove the subconsultant with the conflict of interest and to instruct the prime consultant to seek a post-award change to the prime consultant's compliance plan as described in City Code § 2-9B-23. Such substitutions will be dealt with on a case-by-case basis and will be considered for approval by Small and Minority Business Resources (SMBR) in the usual course of business. The City's decision to remove a prime or subconsultant because of a conflict of interest shall be final.
- A consultant performance evaluation will be performed on all professional services contracts. This evaluation will be conducted at the end of each Design and Construction phase, or at assignment completion for those projects with no distinct phases (i.e., surveying, SUE services, etc.).